

SHUIN, K.A.

Characteristics of the crop formation of some vegetables in  
the Buryat A.S.S.R. Trudy BKNII no.4:203-207 '60. (MIRA 15:3)  
(Buryat-Mongolia—Vegetables)

COUNTRY	:	USSR
CATEGORY	:	Cultivated Plants. Potatoes, Vegetables, Cucurbita. M
ABS. JOUR.	:	RZhBiol., No. 23 1958, No. 104699
AUTHOR	:	Shuin, K. A.
INST.	:	Buryat-Mongolian Zooveterinary Institute
TITLE	:	Thermal Pre-Sowing Preparation of Tomato Seeds.
ORIG. PUB.	:	Tr. Buryat-Mong. zoovet. in-ta, 1956, vyp. 10, 195-201
ABSTRACT	:	Seeds of tomatoes Gruntovyy gribovskiy 01180, swollen as the result of 7-hour soaking, were kept for 15 days at the temperature of -3°, 0° or in the conditions of an alternation of low and high temperatures. Test specimens of the seeds which had been grown at 4, 8, 10 and 15° were taken daily for 15 days from each variant. The percentage of the seeds which germinated was calculated 30 days after taking the test specimen for growing. Swollen seeds which had not been subjected to the effect of low temperatures, served as the control. Freezing the seeds through at -3° (for three-five days, either continuously or 12 hours a day) increased

Card: 1/2

BOGDANOV, Daniil Vasil'yevich; MARTI, Yu.Yu., otv.red.; SHUIN, V.I.,  
red.; GORYACHKVA, G.G., tekhn.red.

[Hydrological conditions in the southeastern part of the North  
Atlantic] Gidrologicheskie usloviia v iugo-vostochnoi chasti  
Severnoi Atlantiki. Moskva, Vses.nauchno-issled.in-t morskogo  
rybnogo khoz. i okeanografii, 1959. 47 p. (MIRA 13:2)  
(Atlantic Ocean--Hydrology)

ZAGLJUBOTSKIY, P.M.; DURNOV, G.P.; LAVRUSEVICH, V.V.; MIKHAYLENKO, V.I.;  
IVANOV, V.M., spetsared.; SHUIN, V.I., red.; FORMALINA, Ye.A.,  
tekhn.red.

[Practices of efficiency promoters in ship repairing] Opyt  
ratsionalizatorov v sudoremonte. Moskva, 1959. 53 p.  
(MIRA 13:9)

(Ships--Maintenance and repair)

BORODATOV, V.A., kand.biolog.nauk; DEMIDOV, V.F.; DUKHANIN, A.N.; ZHUKOVA, A.I.; KADIL'NIKOV, Yu.V.; KARPECHENKO, Yu.L.; KORZHOVA, Yu.A.; MAKHOVSKY, Z.I.; PETROV, G.P.; PROSVIROV, Ye.S.; HULEV, N.N.; SOKOLOV, O.A.; SPICHAK, M.K.; KHROMOV, N.S.; SHUIM, V.I., red.; FORMALINA, Ye.A., tekhn.red.

[Study of tuna fish and sardines in the eastern part of the Atlantic Ocean; report on the cruise of the scientific fishery survey expedition of 1957] Issledovaniia tuntsa i sardiny v vostochnoi chasti Atlanticheskogo okeana; reisovyj otchet nauchno-poiskovoi ekspeditsii, 1957 g. Moskva, 1959. 158 p. (MIRA 13:6)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii.  
(Atlantic Ocean--Tuna fish) (Atlantic Ocean--Sardines)  
(Fish, Canned)

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4

SMOLIN, V.N.; POLYAKOV, V.K.; YESIKOV, V.I.; SHUINOV, Yu.N.

Test stand study of the starting conditions for the I.V.  
Kurchatov Beloyarsk Nuclear Power Plant. Atom. energ. 19  
no.3:261-268 S '65. (MIRA 18:9)

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4"

NAMETKIN, N.S.; SHUINOVA, N. Ya.; BEREZKIN, V.G.

Gas-liquid chromatography of some unsaturated organosilicon compounds. Izv. AN SSSR Ser. khim. no.11:2080-2082 N '64  
(MIRA 18:1)

1. Institut neftekhimicheskogo sinteza im. A.V. Topchiyeva  
AN SSSR.

L 2228-66 EWT(m)/EPF(n)-2/T/ DM  
ACCESSION NR: AP5023767

UR/0089/65/019/003/0261/0268  
621.039.514.23

AUTHOR: Smolin, V. N.; Polyakov, V. K.; Yesikov, V. I.; Shuinov, Yu. N. 25  
B

TITLE: Study on a stand of the start-up conditions of the I. V. Kurchatov atomic power plant in Beloyarsk

SOURCE: Atomnaya energiya, v. 19, no.3, 1965, 261-268

TOPIC TAGS: atomic energy plant equipment, nuclear power plant, water cooled nuclear reactor, boiling water reactor

ABSTRACT: The hydrodynamic stability of the flow rate of the heat carrier in the channels under boiling conditions was studied, and the switching of heating channels from water-cooling to vapor-cooling operation followed by the attainment of the rating is discussed. Experimental thermotechnical stands were constructed the basic configurations of which corresponded to the technological layouts of the first and second units of the electric power station. On the basis of the data obtained from the experiments performed, operational conditions providing for a stable flow rate and reliable cooling in the evaporating and superheating

Card 1/2

L 2228-66  
ACCESSION NR: AP5023767

channels during the start-up period and under rated conditions were selected. It is shown that the method of gradual replacement of water in the superheating channels by a steam-water mixture and then by steam insures an adequate operation of the channels and of the entire system during the start-up period. Orig. art. has: 7 figures.

ASSOCIATION: None

SUBMITTED: 18Sep64

ENCL: 00

SUB CODE: NP

NO REF SOV: 005

OTHER: 003

Card 2/2

SHUK, V.I. gornyy inzh.; PALAGUSHKIN, B.F., gornyy inzh. (Karaganda).

Ground movements over No.17-bis mine stopes of the "Karagandaugol'"  
combine. Ugol' 33 no.2:6-10 F '58. (MIRA 11:2)  
(Karagnada Basin--Subsidence (Earth movement))

ZHUKOVSKIY, P.M., redaktor; SOCHAVA, V.B., redaktor; SHUKACHEV, V.N.  
redaktor; TIKHOMIROV, B.A., redaktor; SHISHKIN, B.K., redaktor;  
LITKEVICH, S.V., redaktor izdatel'stva; YAKOVLEVA, B.M., redaktor  
izdatel'stva; PEVZNER, P.S., tekhnicheskiy redaktor

[Problems in botany] Problemy botaniki. Pod obshchey red. P.M.  
Zhukovskogo, i dr. Moskva, Izd-vo Akademii nauk SSSR. Vol.2. 1955.  
374 p. (MIRA 9:8)

1. Vsesoyuznoye botanicheskoye obshchestvo. 2. President Vse-  
soyuznogo botanicheskogo obshchestva (for Sukachev)  
(Botany)

S/137/61/000/012/028/149  
A006/A101

AUTHOR: Shukakidze, N. D.

TITLE: Investigating the dressing ability of molybdenum ore of the Aygedzor deposit (Armenian SSR)

PERIODICAL: Referativnyy zhurnal Metallurgiya, no. 12, 1961, 11, abstract 1272 ("Yezhegodnik Kavkazsk. inst. mineral'n. sry'ya za 1957 g." Moscow Gosgeoltekhnizdat, 1959, 20 - 21)

TEXT: According to results of chemical analysis, a technological sample that was investigated to determine its dressing ability, contained Mo 0.27%, Cu 0.18% and Fe 2.7%. The presence of Cu in the ore calls for selective flotation. Experiments were made with the aid of collective-selective flotation and direct selective flotation. Coarse collective concentrates were obtained containing Mo > 2% and Cu about 1%; metal extraction was > 90%. 

L. Vorob'yeva

[Abstracter's note: Complete translation]

Card 1/1

S/137/61/000/012/030/149  
A006/A101

AUTHORS: Vartanyan, K.T., Shukakidze, N.D.

TITLE: Developing a flotation-hydrometallurgical method of concentrating gold-containing antimonous-arsenous ores of the Zopkhito deposit (Verkhnyaya Racha)

PERIODICAL: Referativnyy zhurnal: Metallurgiya, no. 12, 1961, 11; abstract 12076 ("Yezhegodnik Kavkazsk. in-ta mineral'n. syr'ya za 1957 g.", Moscow, Gosgeoltekhnizdat, 1959, 23 - 24)

TEXT: According to results of chemical analysis the technological ore sample contained Sb 2.9% in the form of antimonite, and in the form of Sb oxidized compounds about 10%, As 1.27%, Fe 6% and Au about 2.2 g/ton of ore. Tests on coarse flotation of Sb were made during a short period of time, the ore was crushed up to 60% of class-0.074 mm, with lime admixtures of 0.5-1.0 kg per 1 ton of ore. Flotation of As-pyrite concentrate was carried out after crushing of tails of As-flotation up to 74.48% of class-0.074 mm. Under such conditions after two scourings Sb concentrates of first class were obtained with 61.1% Sb, and of second class with 20.15% Sb; coarse As-pyrite concentrates with 6.5% As

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Developing a flotation-hydrometallurgical ...

S/137/61/000/012/030/149  
A006/A101

content were also obtained at 67.72% extraction. After scouring the concentrate contains 21.52% As. Au concentration is observed in As-pyrite concentrate where its content attains 10.6 kg/t.

L. Vorob'yeva

[Abstracter's note: Complete translation]

Card 2/2

PLAKSIN, I.N.; SHUKAKIDZE, N.D.

Comparative study of the floatability of stibnite from three  
deposits depending on the pH of the medium. Izv. vys. ucheb.  
zav.; tsvet. met. 3 no. 6:42-45 '60. (MIRA 14:1)

1. Krasnoyarskiy institut tsvetnykh metallov. Kafedra metallurgii  
blagorodnykh metallov.  
(Flotation) (Antimony)

ARAZASHVILI, I.M.; SHUKAKIDZE, N.D.

Some possibilities for extracting manganese from manganese  
Tailings of Chiatura dressing plants. Soob. A■ Gruz. SSR 25  
no. 3:279-284 S '60. (MIRA 14:1)

1. Kavkazskiy institut mineral'nogo syr'ya, Tbilisi.  
Predstavлено академиком R.I. Agladze.  
(Manganese—Metallurgy)

DERYAGIN, B.V.; SHUKAKIDZE, N.D.

Floatability of antimonite as a function of the zeta potential value. Dokl.AN SSSR 134 no.2:376-379 S '60. (MIRA 13:9)

1. Institut fizicheskoy khimii Akademii nauk SSSR. 2. Chlen-korrespondent AN SSSR (for Deryagin).  
(Stibnite) (Flotation)

377 677 740 71  
112-2-2965  
Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957, Nr 2, p. 60 (USSR)

AUTHOR: Shukalo, A., Gorlovich, V.

TITLE: The construction of the Shil'skaya Hydro-electric Power Station  
(Stroitel'stvo Shil'skoy sel'skoy gidroelektrostantsii)

PERIODICAL: Sel'skiy Stroitel', 1956, Nr 4, pp. 3-4

ABSTRACT: The Shil'skaya hydro-electric power station on the Velikaya River  
(Velikolukskaya Oblast') has a capacity of 1360 kw. The hydro unit  
consists of a 10.3 m high spillway dam, a 9.3 m high earth dam, and a  
river-bed hydro-electric power station structure. The foundation  
of the dam is of dolomite. The spillway dam is of prefabricated  
reinforced concrete blocks of cellular construction [Amburseen type],  
the cells measuring 3 x 4 and 4x5 m and filled with sand and gravel. The  
blocks are fabricated in the area and put in place by mobile crane.  
The dam is equipped with a 24 m long, hydraulically operated sector  
gate. The hydroelectric power station structure is built with an  
undersluice to permit drainage of the spring flood waters. The above-  
water part of the structure is of brick. Construction involved  
93,000 cu m of excavation work, 7,123 cu m of concrete and reinforced

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112-2-2965

The construction of the Shil'skaya Hydroelectric Power Station. (Cont.)

concrete work, and 6,000 cu m of rock excavation. Data are given  
on how work was organized, on the cost of construction and the cost  
of the hydroelectric power station. Ye. I. D.

Card 2/2

SHUKALO, A.

Rural electrification in Eastern Siberia and the Far East. Sel'stroi. 15 no.11:19-20 N '60. (MIRA 13:11)

1. Zamestritel' nachal'nika Glavsel'elektro Ministerstva sel'skogo khozyaystva RSFSR.

(Soviet Far East--Rural electrification)  
(Siberia, Eastern--Rural electrification)

SHACKALEY, S.H.

卷之三

三

ପ୍ରକାଶକ ମନ୍ତ୍ରୀ

Bornit robot po wyprosze elektronu klawisz, typ. K. Elektryczne skrzynie magazynowe, elektryczny drzwi, elektryczny trynek na perspektywicę tutej, elektryczny

—. "A Report on Economic, Agricultural, and Social Conditions in the Soviet Union." *Review of Economics, Agriculture, Organization and Institutions* (Moscow, 1960). 222 p. 55,000 copies printed.

三

**Harvest** **the** **golden** **time** **of** **your** **own** **success** **and** **achieve** **your** **desires.**

## **Electric Machines / 2) Electric Drive and Electric Traction; 3) Arcovia**

**Editorial Review, and Automatic Regulation and Instruments.** No particularities are mentioned. Reference accompany most of the articles.

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1422 BISHOP

A TWO-STAGE TRANSMISSION WITH A COMPENSATOR GENERATOR

תְּלִימָדָה

Frequency for Speed Regulation of Induction Electric Motors

WILHELM HEINRICH WILHELM HEINRICH

Longitudinal-Field Rotating Amplifiers

Transient Conditions in a Circuit of Single-phase Rectifier and Reactor

卷之三

**PARADES, BUSES AND PUBLIC TRANSPORTATION OF PERSONAL PROPERTY**

LAPIDA, Va. No. Single-Phase Series Commutator Traction Motor For use in Electric Locomotives and Electric Traction Cars. See "Lapida" in

卷之三

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4"

SHUKALOV, N. K.

168T34

**USSR/Engineering - Shipbuilding, Cables Jan/Feb 47**

**"Vulcanization of Damaged Rubber Covers in Cables,"**  
**N. K. Shukalov, Engr**

**"Sudostroyeniye" No 1, pp 16-18**

Describes procedure for repairing damage to cable rubber cover. Portable vulcanizer was developed by Constr Bu, Elektromortrest (Elec Maritime Trust). Device is simple and convenient. Recommends three sizes of vulcanizers for cables with cross-section areas of 16, 120, and 240 sq mm. Gives basic dimensions for all three types.

168T34

S/196/61/000/012/023/029  
E194/E155

AUTHORS: Zavalishin, D.A., and Shukalov, V.F.

TITLE: Valve-type frequency converters intended for frequency speed control of induction motors

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no.12, 1961, 11-12, abstract 12K 78. (Vestn. elektroprom-sti, no.6, 1961, 41-48)

TEXT: The article considers circuits of valve-type frequency changers. Independent frequency-changers with capacitor switching (bridge circuit with three-phase inverter) require greatly increased capacitance when the frequency is reduced. For example, for an induction motor of 28 kW, 500 V, 1000 r.p.m. at a frequency of 50 c/s a reactive power of 26 kVAR is required; at 10 c/s 650 kVAR; and at 5 c/s 2600 kVAR. For such a frequency changer to operate stably it is necessary to control the converted d.c. voltage and the capacitance of the switching and compensating capacitors. This control should be effected on changing the output frequency of the frequency changer, the load

Card 1/3

Valve-type frequency convertors ... S/196/61/000/012/023/029  
E194/E155

than that of the supply voltage (for instance, when converting a frequency of 200-400 c/s to a controlled frequency of 0-50 c/s) and when a whole number of primary half-waves may be contained within a single half-period of secondary frequencies. Here, some complication of the grid control circuit is required to ensure that the secondary voltage is of sinusoidal waveform. The grid control circuit may be based either on mechanical switching with phase-shifting bridges and peak transformers or on static magnetic-semiconductor circuits acting on the same bridges and peak transformers. Oscillograms are given of the current and voltage of a three-phase motor of 2 kW, 380 V, 50 c/s taken with a secondary frequency of 15 c/s, 115 V supplied from a single-phase circuit of 400 c/s.  
8 literature references.

[Abstractor's note: Complete translation.]



Card 3/3

ACC NR: AM6014513

(N)

Monograph

UR/

Kovalev, Feliks Ivanovich; Mostkova, Galina Pavlovna; Sviridov, Artem Fedorovich;  
Shukalov, Vladislav Fedorovich

Marine static/semiconductor/ converters (Sudovyye staticheskiye/ poluprovodnikovyye/  
preobrazovateli) Leningrad, Izd-vo "Sudostrayeniye", 1965, 240 p. illus., bibliog.  
1,600 copies printed.

TOPIC TAGS: ship component, electric energy conversion, frequency conversion, semi-conductor rectifier, electric filter

PURPOSE AND COVERAGE: This book presents marine static electric power converters (rectifiers, inverters, frequency converters) in semiconductor valves, principles of their action, and a comparison of different basic schemes. It also includes recommendations for the selection of more optimal schemes for marine static electric power converters in semiconductor valves. According to the given design relationship it is possible to determine parameters of basic elements of converter units and construct their operating characteristics. Also included are marine rectifier aggregates in semiconductor valves with regulated and stabilized output voltage and current for supplying various types of loads. External and regulating characteristics are shown, such as the power factor, devices protecting against overcurrents and overvoltages, filters, structures and means of cooling marine rectifier aggregates. The book is recommended for engineers and technicians working with the de-

Card 1/2

UDC 621.314:629.12

ACC NR: AM5014513

sign and assembly of marine electric power units. It also can be useful to students in ship-building institutes.

TABLE OF CONTENTS (abridged):

- Preface -- 3
- Introduction -- 5
- Ch. I. Rectifiers -- 7
- Ch. II. Inverters -- 92
- Ch. III. Frequency converters -- 144
- Ch. IV. Marine rectifier aggregates -- 164
- Ch. V. Protection and signalling in marine converters -- 203
- Ch. VI. Construction of marine converters -- 223
- Bibliography -- 237

SUB CODE: 13,10 / SUBM DATE: 22Oct65 / ORIG REF: 043 / OTH REF: 025 /

Card 2/2

FREYDLIN, G.N.; DAVYDOV, V.N.; Prinimali uchastiye: SHUKALOVA, R.M.,  
TOLSTENKO, T.B.

Separation of phthalic acid by esterification without  
catalysts. Zhur.prikl.khim. 35 no.5:1150-1153 My '62.

(MIRA 15:5)

(Phthalic acid) (Esterification)

SHUKALOVA, Ye.A.; KONKIN, A.A.

Kinetics of cuprammonium fiber swelling in water. Izv.vys.ucheb.  
zav.; tekhn.tekst.prom. no.1:141-147 '59. (MIRA 12:6)

1. Moskovskiy tekstil'nyy institut.  
(Rayon-Testing) (Textile chemistry)

5(3,4)

SOV/80-32-5-26/52

AUTHORS: Konkin, A.A., Shukalova, Ye.A.

TITLE: On the Role of Diffusion in the Hydrolysis of Polysaccharides in an Heterogeneous Medium. Communication 13.

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, № 5, pp 1076-1080 (USSR)

ABSTRACT: The study of diffusion processes has a great significance for the hydrolysis of polysaccharides by weak solutions of acids. The energy of activation of the hydrolytic reaction found by the authors has the value of 26-30 kcal/mole which is characteristic for chemical processes. The chemical reaction rate increases faster with the temperature than the diffusion rate. The activation energy is nearly the same for polysaccharides in a homogeneous or a heterogeneous medium and for monosides and disaccharides in a homogeneous medium. The energy is therefore independent of the molecular weight, the composition, the structure of the elementary link and of the macromolecule. The activation energy in the hydrolysis of polysaccharides arises from the rupture of the acetal bond. The diffusion of water into cellulose was studied in viscose monofiber of 400-800  $\mu$  in diameter. Diffusion was determined by the degree of swelling, which was in-

Card 1/2

SOV/80-32-5-26/52

On the Role of Diffusion in the Hydrolysis of Polysaccharides in an Heterogeneous Medium. Communication 13.

vestigated at 17, 27 and 37°C. The energy of activation was determined by the graphic method as 7,800 cal/mole. This value is considerably below that of the hydrolysis of the acetal bond. The diffusion of the hydrolyzing agent has no effect on the reaction rate of the hydrolysis of polysaccharides. Sharkov has shown that the rate of hydrolysis of cellulose does not depend on the duration of the preliminary soaking in diluted acid.

There are: 5 tables, 1 set of graphs and 7 references, 6 of which are Soviet and 1 English.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna  
(All-Union Scientific Research Institute of Artificial Fiber)

SUBMITTED: December 31, 1957

Card 2/2

SHUKAN, Ye.P.; IVANOV, I.M.

Industrial flotation of barite with an oxidized petroleum fraction.  
TSvet. met. 34 no.3:10-14 Mr '61. (MIRA 14:3)  
(Flotation—Equipment and supplies) (Barite)

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4

VINOKUROV, F.P.; GRABEL'NIKOV, V.P.; DENISENKO, Z.I.; SHUKAN, Ye.P.

Industrial tests and adoption of a system for obtaining a barite weighting compound at the Salair ore dressing plant. TSvet. met. (MIRA 18:3)  
38 no.2:5-8 F '65.

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4"

DOROZHIN, N.A.; SHUKANOV, A.S.

Hibernation of the causative agent of the downy mildew of sugar beets (*Peronospora schachtii* Fuchee) in White Russia. Dokl. AN BSSR 9 no.3:208-210 Mr '65. (MIRA 18:6)

1. Kafedra sistematiki rasteniy Belorusskogo gosudarstvennogo universiteta imeni Lenina.

SHUKANOV, B.

AID P - 1261

Subject : USSR/Aeronautics

Card 1/1 Pub. 58 - 5/15

Author : Shukanov, B., Guards Capt.

Title : Pupil of an aeroclub

Periodical : Kryl. rod., 2, 7-8, F 1955

Abstract : Biographical notes on the life of an well known Air Force officer Smirnov, A. S., Guards Col., Twice Hero of the Soviet Union. Photo.

Institution : None

Submitted : No date

SHUKAREV, N.F., inzh.

Automating the switching on and off of electric welding trans-  
formers. Suggested by N.F. Shukarev. Rats.i izobr.predl.v  
stroj. no.14:94-96 '60. (MIREA 13:6)

1. Trest No.8 Promtekhnogomontazh Gor'kovskogo sovnarkhoza,  
g.Gor'kiy, Kanavino, Vokzal'naya ul., 22.  
(Electric switchgear)

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4

SHUKAREV, S. A.

"80 years of Mendeleev's periodic law, 1869-1949". Shukarev, S. A. (p. 369)

SO: Journal of General Chemistry, (Zhurnal Obshchey Khimii) 1949, Vol. 19, No. 3.

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4"

SHUKAREV, S. A.

"Rules of isonucleons and the distribution of stable subelements among 'artiaids' and 'perissads'." Shukarev, S. A. (p. 380)

SO: Journal of General Chemistry, (Zhurnal Obshchey Khimii) 1949, Vol. 19, No. 3.

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4

SHUKAREV, S. A.

"So-called Anomalies and Degenerated Anomalies of Elemental (Atomic) Weights." Zhur. Obshch. Khim. 19, No. 3, 1949. Chair of Gen and Inorg Chem, Leningrad State U. -cl1949.

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4"

SHUKAREV, S. A.

"Missing perissads and artiads, devoid of odd-numbered subelements". Shukarev, S.A.  
(p. 391)

SO: Journal of General Chemistry. (Zhurnal Obshchei Khimii) 1949, Vol. 19, No. 3.

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4

SHUKAREV, S.A.

NOVIKOV, G.I.; ORANSKAYA, M.A.; SHUKAREV, S.A.

Thermodynamics of the reduction of ferrous chloride and bromide.  
Uch.zap. Len.un. no.155:16-21 '52. (MLRA 9:1)  
(Iron salts)

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4"

SHUKAREV D. N.

Sept 1948  
Journal Technique  
Laboratory Apparatus

Chem  
2

✓ 2616 Colorimetric analysis in the ultra-violet region of the spectrum. S. A. Shukarev and S. N. Andreev *J. anal. Chem., USSR*, 1953, 8, 22-32). Use is made of the cryst. filters of Stekhanov (*v. supra*). The method is applied to the determination of benzene (~0.001%) in ethanol without preliminary treatment, naphthalene in ether, anthracene in oils, etc. G. S. Smirn.

ME  
7-27-54

*SHUKAREV, S.A.*

B-8

USSR/ Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium.  
Physicochemical analysis. Phase transitions

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11143

Author : 1. Shukarev S.A., Tolmacheva T.A., Oranskaya M.A., Komandorskaya L.V.

2. Shchukarev S.A., Oranskaya M.A., Shemyakina T.C.

Title : Thermal Dissociation of Platinum Halides. Communication 1. Platinum  
Bromides. Communication 2. Platinum Chlorides.

Orig Pub : Zh. neorgan. khimii, 1956, 1, No 1, 8-16; 17-23

Abstract : 1. Statistical method of F. Ephraim (Ber., 1917, 50) was used to investigate temperature dependence of thermal dissociation of  $PtBr_4$  (I),  $PtBr_3$  (II),  $PtBr_2$  (III) and  $PtBr$  (IV). Scheme of the unit is described. Data obtained are represented as  $lg P - 1/T$  graphs. From the slope of the straight lines were determined equations of dependence of dissociation pressure on temperature, for I  $lg P = 7.809 - (4549/T)$ , II  $lg P = 7.195 - (4808/T)$ , III,  $lg P = 6.064 - (5123/T)$  and IV  $lg P = 4.755 - (4679/T)$ . Calculated therefrom were the values of  $P_{Br_2}$ , at  $10^{\circ}$  intervals, for I (over range  $200-280^{\circ}$ ), II ( $280-390^{\circ}$ ), III ( $420-500^{\circ}$ ) and IV ( $460-510^{\circ}$ ) which are tabulated. By using these data calculations were made of the values of

Card 1/3

USSR/ Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium.  
Physicochemical analysis. Phase transitions

B-8

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11143

enthalpy and entropy changes ( $\Delta H$  and  $\Delta S$ ) in reactions of successive dissociation of the bromides, on the assumption that these quantities are independent of the temperature within the interval under study. Determined were the values of enthalpy of formation  $\Delta H$  (formation), (in kcal/mole) from metal and gaseous bromine, for I, II, III and IV, which are, respectively, -44.0; -33.6; -22.6; -10.75, and thus in good agreement with literature data. The actual existence of each bromide was confirmed by chemical analysis and recording of Debye X-ray patterns. It is shown that below 340°K IV must undergo exothermal disproportionation. The appreciable scattering of experimental data forces the authors to assume that platinum bromides possess the property of interacting with one another to form solid solutions.

2. Investigated was the temperature dependence of dissociation pressure of  $PtCl_4$  (V) (298-358°),  $PtCl_3$  (VI) (332-394°),  $PtCl_2$  (VII) (490-530°), and  $PtCl$  (VIII) (568-762°). On the basis of the data thus obtained the enthalpies of formation were calculated (kcal/mole): V -62.7; VI -48.1; VII -33.4; VIII -11.7; these values are in satisfactory agreement with literature data. Debye X-ray patterns of the platinum chlorides have

Card 2/3

USSR/ Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium.  
Physicochemical analysis. Phase transitions

B-8

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11143

demonstrated the actual existence of each substance. Experimental data for the reactions  $2\text{PtCl}_n = 2\text{PtCl}_{n-1} + \text{Cl}_2$  are expressed by the equations  $\lg P_{\text{Cl}_2} = A - (B/T)$ , wherein A and B are: for n = 4, 9.04, 6267.5; n = 3, 8.42, 6303.1; n = 2, 10.59, 9131.1; n = 1, 4.36, 5114.9. On the basis of the data obtained and those found on the literature an analysis is made of the dependence of isobaric potential of the valency is discussed. It is shown that at low temperatures ( $< 600^\circ$ ) VIII must undergo exothermal disproportionation.

Card 3/3

*SHUKAREV, S.A.*

USSR/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria,  
Physical-Chemical Analysis, Phase Transitions.

B-8

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1958, 7122.

Author : S.A. Shukarev, M.P. Morozova, Kan Kho-yn.

Inst :

Title : System Strontium - Antimony and Formation Heats of Stron-  
tium-Antimony Compounds.

Orig Pub: Zh. obshch. khimii, 1957, 27, No 7, 1737-1740.

Abstract: The existence of compounds  $\text{SrSb}_3$ ,  $\text{SrSb}$ ,  $\text{Sr}_3\text{Sb}_2$  and  $\text{Sr}_2\text{Sb}$  was revealed at the study of density and microstructure of Sr and Sb alloys of various composition. The enthalpies of  $\text{SrSb}$ ,  $\text{Sr}_3\text{Sb}_2$  and  $\text{Sr}_2\text{Sb}$  formation were determined by measuring the solution heat of these compounds in 1 n. HCl (see therethods in RZhKhim, 1955, 34012) and they are correspondingly equal to  $-46.6 \pm 2.3$ ,  $-136.3 \pm 1.2$  and  $-78.0 \pm 1.1$  kcal per mole at  $25^\circ$ .

Card : 1/1

-10-

S/054/60/000/02/14/021  
B022/B007

AUTHORS: Shukarev, S. A., Vasil'kova, I. V., Sharupin, B. N.

TITLE: The Investigation of the Halides of Molybdenum. IV. The Determination of the Formation Enthalpy of Molybdenum Di- and Trichloride

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1960, No. 2, pp. 112-120

TEXT: The present article comprises part of the material used in the dissertation of B. N. Sharupin. It was found that in the oxydation of molybdenum di- and trioxide in oxygen a mixture of molybdenum trioxide and molybdenum dioxide is obtained. Table 1 gives the results obtained by analysis of the molybdenum- and chlorine content in  $\text{MoCl}_3$  and  $\text{MoCl}_2$ , which are compared with the data calculated according to theory. The calorimeter used for the determination of combustion enthalpy was calibrated with metallic magnesium, which was obtained in spectroscopically pure state from the Vsesoyuznyy alyuminiiyevo-magniyevoj institut (All-Union Aluminum-Magnesium Institute). The results of calibration are given in

Card 1/2

SHUKAREV, S.A.; KOKOVIN, G.A.

Heats of formation of  $WBr_6$  and  $WBr_5$ . Zhur. neorg. khim 9  
no.6:1309-1315 Je '63 (MIRA 17:8)

1. Leningradskiy gosudarstvennyy universitet i Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.

DANILOV, S.N., glav. red.: ARBUZOV, A.Ye., red.; VVEDENSKIY, A.A.,  
red.; VENUS-DANILOVA, E.D., red.; ZAKHAROVA, A.I., red.;  
IOFFE, I.S., red.; KAVERZNEVA, Ye.D., red.; LUTSENKO, I.F.,  
red.; MISHCHENKO, K.P., red.; NEMTSOV, M.S., red.; PETROV,  
A.A., red.; FREYDLINA, R.Kh., red.; SHENYAKIN, M.M., red.;  
SHUKAREV, S.A., red.; YUR'YEV, Yu.K., red.

[Biologically active compounds] Biologicheski aktivnye  
soedineniya. Moskva, Nauka, 1965. 305 p.  
(MIRA 18:7)

SHUKHATOVICH, I.M.

Strengthening of business accounting principles in the  
material and technical procurement. Zhel.dor.transp. 47  
no.12:68-72 D '65. (MIRA 18:12)

1. Glavnnyy bukhalter Glavnogo upravleniya material'no-  
tekhnicheskogo obespecheniya.

SURNAME, Given Names SHUKAROV, L.

Country: Bulgaria

Academic Degrees: Agronomist

Affiliation: Central Scientific Research Institute of Plant Growing at the Bulgarian Academy of Sciences (Tsentralen Nauchno-Izследovatelski Institut po Rastenievudstvo pri Bulgarskata Akademiya na Naukite)  
Sources: Sofia, Priroda, Vol X, No 4, July/August 1961, pp 81-84

Data: "Bulgarian Tomatoes."

6PO 90164

GLUKHOV, M.K., dotsent, general-major aviatsii; DANILEVSKIY, M.M.;  
YERMAKOV, P.G.; YEMEL'YANENKO, V.B.; LOZOVA-SHEVCHENKO, V.M.;  
PLYACHENKO, P.F.; SEKACHEV, V.I.; SHUKAYEV, A.A.; MIRNYY, A.S.,  
polkovnik, red.; GORDEYEV, N.P., polkovnik v otstavke, red.;  
STREL'NIKOVA, M.A., tekhn.red.

[Air forces] Voyenno-vozdushnye sily. Moskva, Voen.izd-vo M-va  
obor.SSSR, 1959. 202 p. (MIRA 12:12)  
(Russia--Air force)

SHUKAYEV, V.V., inzh.

Ammonia service stations. Khol.tekh. 40 no.5:51-53 S-0 '63.  
(MIRA 16:11)

SHUKAYLO, A. T.

Mar 1948

USSR/Medicine - Brucellosis  
Medicine - Adrenalin

"Influence of the Introduction of Adrenalin in Isolating Brucella from the Blood," Ye. A. Shimanovskaya, A. T. Shukaylo, Chair Microbiol, Dagestan Med Inst, 1 p

"Sovets Medits" No 3

Adrenalin injection increases the percentage of hemoculture secretion in brucellosis patients and somewhat raises the titer in the Wright reaction. This method makes it possible to rely upon greater effectiveness in the extraction of asymptomatic, prostrated, and ambulatory brucellosis cases. First generation of brucella from the blood after stimulation by adrenalin was obtained in 10-24 days, while without adrenalin the first appearance was after 21-35 days.

PA 51T58

SHUKAYLO, V.F., inzh.

Fast processing of data from an experiment for a statistical  
calculation of the longevity of mining machinery. Izv. vys.  
ucheb. zav.; gor. zhur. no. 12:41-44 '59. (MIRA 14:5)

1. Khar'kovskiy gornyy institut. Rekomendovana kafedroy gornykh  
mashin i rudnichnogo transporta.  
(Mining machinery)

SHUKAYLO, V.F., inzh.

Determining the capacity of an electric motor of a face conveyor with a changing load. Izv. vys.ucheb.zav.; gor. zhur. no.5:123-130 1960. (MIRA 14:3)

1. Khar'kovskiy gornyy institut. Rekomendovana kafedroy gornykh mashin i rudnichnogo transporta.  
(Conveying machinery—Electric driving)

SHUKAYLO, VIKTOR FEDOROVICH, aspirant

Problems concerning the statistical dynamics of an electric  
drive. Izv. vys. ucheb. zav.; elektromekh. 4 no.5:50-68 '61.  
(MIRA 14:7)

1. Kafedra gornykh mashin rudnichnogo transporta Khar'kovskogo  
gornogo instituta.  
(Electric driving)

SHUKAYLO, V.F., inzh.

Design of circular loaders for projection length. Ugol' Ukr. 5  
no.7:24-25 J1 '61. (MIRA 15:1)  
(Coal mining machinery--Design and construction)

SHUKAYLO, V.F., inzh.

Determination of the power rating of the electric motor of a  
mine conveyor operating with a variable load. Vest. elektroprom.  
32 no.12:33-34 D '61. (MIRA 14:12)  
(Conveying machinery-Electric driving)

SHUKAYLOV, V.F., aspirant

Strength analysis of gears under random loading. Izv.vys.ucheb.  
zav.; mashinostr. no.1:54-63 '61. (MIRA 14:4)

1. Khar'kovskiy gornyy institut.  
(Gearing)

Shukaylo, V.F.

AID Nr. 984-16 6 June

THEORY OF ACCUMULATION OF FATIGUE DAMAGE IN ASYMMETRICAL  
RANDOM-STRESS CYCLES (USSR)

Shukaylo, V. F. Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye,  
no. 12, 1962, 21-32. S/145/62/000/012/002/011

The determination of the service life of constructions subjected to simple and complex asymmetrical cycles of continuous stresses alone or in combination with discrete random stresses (as in a wing of a jet plane) is discussed. The term "cycle" means a time interval between two successive upward crossings of the average-value line by the stress-time curve. The cycle is "simple" if there is only one pair of extrema; otherwise, the cycle is "complex". The probability of the formation of both cycles is established by applying the concepts of the theory of sets and general service-life formulas for the cases of linear and nonlinear (Markoff-type) damage-accumulation processes are derived in terms of durability functions which determine the limit number of

Card 1/2

Card 2/2

SHUKAYLO, V.F., kand. tekhn. nauk

Determining the capacity of electric drives for scraper conveyors  
of shuttle-action plow apparatus. Izv. vys. ucheb. zav.; gor.  
zhur. 6 no.8:161-166 '63. (MIRA 16:10)

1. Khar'kovskiy institut gornogo mashinostroyeniya, avtomatiki  
i vychislitel'noy tekhniki. Rekomendovana kafedroy elektro-  
tekhniki i elektricheskikh mashin.

AKIMOV, V.T., inzh.; KIBIREV, V.N., inzh.; SHUKAYLO, V.F., kand. tekhn. nauk

Determining the optimal norms for the life of mine haulage equipment.  
Izv.vys.ucheb.zav.;gor.zhur. 7 no.6:74-82 '64.

(MIRA 17:12)

1. Khar'kovskiy institut gornoj mekhaniki, avtomatiki i vychis-  
litel'noj tekhniki. Rekomendovana kafedroy mashin i rudnichnogo  
transporta.

AKIMOV, V.T., inzh.; KIBIREV, V.N., inzh.; SHUKAYLO, V.F., kand. tekhn. nauk.

Statistical analysis of the reliability and reconditioning of  
mine haulage equipment. Izv. vys. ucheb. zav.; gor. zhur. 7  
no. 5:88-97 '64. (MIRA 17:12)

1. Khar'kovskiy institut gornogo mashinostroyeniya, avtomatiki  
i vychislitel'noy tekhniki. Rekomendovana kafedroy gornykh  
mashin i rudnichnogo transporta.

IVAKHnenko, O.G.; Parra, I.K.; Shukaylo, Ye.M.

Industrial testing of magnetic drives with alternating-current  
meters. Avtomatyka no.2:44-50 '56. (MLRA 9:10)

1. Institut elektrotekhniki Akademii nauk URSS.  
(Servomechanisms) (Electric meters, Alternating current).

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4

KACHANOVA, N.A.; SHUKAYLO, Ye. M.

First coordination conference on automatic control. Avtomatyka no.3:100-  
104 '56.  
(MLRA 9:11)  
(Automatism)

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4"

IVAKHNENKO A.G.; PARRA, I.K.; SHUKAYLO, Ye.M.

Development of a reversing drive for the cable drum of an electric tractor. Sbor.trud.Inst.elektrotekh. AN URSR no.14:75-92 '56.  
(Electric driving) (Magnetic amplifiers) (MLRA 9:12)  
(Tractors)

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4

IVAKHnenko, A.G.; SHUKAYLO, Ye.M.

A method for calculating the parameters of a.c. differentiators  
with phase multiplication [with summaries in Russian and English].  
Avtomatyka no.2:35-48 '57. (MLRA 10:8)

1. Institut elektrotekhniki Akademii nauk URSR.  
(Automatic control)

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001550120012-4"

SOV/102-58-3-9/10

AUTHORS:

Shukaylo, E.M. (Shutkaylo, Ye.M.) and Tolmachov, O.B.

TITLE:

A Review of Research on the Scientific Foundations of Process Automation for 1957 (Pidsumky roboty po kompleksniy problemi "Naukovi osnovy avtomatyatsii vyrobnych protsesiv" za 1957 rik).

PERIODICAL: Avtomatika (Kyiv), 1958, Nr.3, pp.102-4 (USSR)

ABSTRACT: The review relates to work done by the Institutes of Ukrainian Academy of Sciences, which is coordinated by a Commission of the Technical Sciences Division. Half the review relates to the Institute of Electrotechnology; work has been done on program control for metal working machinery, and a digital lathe control developed; improvements required to servos have led to a device for recording amplitude and phase characteristics being developed. Many instruments have been developed; semiconductor devices have been applied. Automation has been extended in coal-mining and other fields. The Institute of Machine Design and Automatics has worked on telemetry problems and noise stability topics. The Gas

Card 1/2

SHUKE, K

SHUKE, K. Viticulture in the district of Pogradec. p.17.

Vol. 10, No. 5, May 1956, PER BUJQESINE SOCIALISTE, TIRANE, ALBANIA.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 10,  
Oct. 1956.

DEGUTIS, Yu. [Degutis, J.]; SHUKELENE, D. [Sukeliene, D.]

Synthesis of ethylenimides and 2-chloroethylamides of  
n-[di-(2-chloroethyl)-amino]-phenylalkane acids. Zhur.VKHO 6  
no.5:583-584 '61. (MIRA 14:10)

1. Onkologicheskiy nauchno-issledovatel'skiy institut Ministerstva  
zdravookhraneniya Litovskoy SSR.  
(Acids, Organic) (Imides)

DEGUTIS, Yu.; SHUKELENE, D. [Sukeliene, D.]

Synthesis and certain reactions of nitriles of N, N-di  
(2-chloroethyl)aminophenylalkanoic acids. Zhur. ob. khim. 31  
no.10:3326-3330 O '61. (MIRA 14:10)

1. Vil'nyusskiy gosudarstvennyy universitet imeni V.Kapsukasa i  
Onkologicheskiy nauchno-issledovatel'skiy institut Litovskoy SSR.  
(Nitriles)

AUTHOR: Shuker S.M., Engineer. 96-7-24/25

TITLE: Standard projects for the main building of regional power stations of 1.2 million kilowatts capacity with block sets types CBK-200 and ПБК-200. (Tipovoye proektnye zadaniya glavnnykh korpusov GRES Moshchnost'-yu 1.2 mln kvt s blocknymi aggregatami SVK-200 i PVK-200.)

PERIODICAL: "Teploenergetika" (Thermal Power) 1957, Vol.4, No.7, pp. 91 - 94 (U.S.S.R.)

ABSTRACT: The article first describes a project for a power station of 1.2 million kilowatts with sets CBK-200 that has been developed by Teploelektroproekt. It includes six sets with steam conditions of 220 atm. and 600 °C with reheat to 565 °C and six direct flow boilers each of 640 t/h, 230 atm. and 610/570 °C. The sets are arranged in the block system. The description covers thermal design, fuel and ash handling arrangements and several variants of bunkers. Altogether eleven variants of the arrangement were worked out. The leading characteristics and dimensions of the main building are given in Table 1.

The arrangement of a similar station with sets

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Standard projects for the main building of regional power stations of 1.2 million kilowatts capacity with block sets types CBK-200 and BK-200. (Cont.)

96-7-24/25

type BK-200 is given in rather more detail. This project provides for six sets (block arrangement). The turbine steam conditions are 130 atm., 565°C with reheat to 565°C and six direct flow boilers of 660 t/h, 140 atm., and 570/570°C. Four main variants were worked out with different bunker arrangements, the leading dimensions of the main building are given in Table 2. A full description is given of the ash handling system, the thermal circuit feed pumps, fuel pulverisation and automatic devices. The Technical Council of the Ministry of Power Stations (MES) has noted that the projects are in accordance with the appropriate recommendations. The Technical Council has considered the different variants and has picked on one of them as being the most economic, the respective merits and disadvantages of the various variants are considered. The Technical Council has noted the way in which progressive ideas have been made use of. Teploelektroprojekt has been instructed to develop

Card 2/4

Standard projects for the main building of regional power stations of 1.2 million kilowatts capacity with block sets types CVK-200 and  $\cap$  VK-200. (Cont.)

96-7-24/25

an arrangement of the main building of a power station operating on gaseous fuel with provision for possible transition to pulverised coal. The council notes that the project is based on equipment manufactured by Soviet industry and considers it necessary that at the same time as the working drawings are being made on the project which has been accepted to proceed to the development of new arrangements of the main building with new circuits and types of equipment, in particular, boilers with inverted furnaces with gases leaving the top and with a central pulverising installation for wet brown coals. The Technical Council indicated that the working arrangement of the ferro-concrete structure of the building should be standardised for the installation of sets  $\cap$  BK-200 and CBK-200; if it is desirable in particular cases to deepen the machine room or to use other methods of fuel combustion appropriate corrections should be made to the standard drawing; in designing the general plans of power stations every effort

Card 3/4

Standard projects for the main building of regional power stations of 1.2 million kilowatts capacity with block sets types CVK-200 and VK-200. (Cont.)

96-7-24/25

should be made to have the main building close to the water; the working drawing should take into account a number of comments accepted by the committee of experts. 1 figure and 3 tables.

AVAILABLE:

Card 4/4

## 24(0) PHASE I BOOK EXPLOITATION

SOV/371

Minsk. Belaruskiy politicheskiy institut  
 Sbornik nauchnykh robot. Vyp. 60: Seriya fiziko-matematicheskaya.  
 (Collected Scientific Works. Nr 60: Physics and Mathematics Series). Minsk, 1957. Errata slip inserted. 1,000 copies printed.

Sponsoring Agency: Mininstitut vyshego obrazovaniya SSSR.

Tech. Ed.: S. Kh. Pesin; Editorial Board: N. A. Besanov, Docent; Candidate of Physical and Mathematical Sciences (Resp. Ed.); N. V. Popov, Docent, Candidate of Physical and Mathematical Sciences; N. V. Afanas'ev, Docent, Candidate of Physical and Mathematical Sciences; and L. I. Cheshnikov, Docent, Candidate of Physical and Mathematical Sciences (Resp. Ed. for this Number).

PURPOSE: This book is intended for students of the physical and mathematical sciences. This is a collection of 19 articles on mathematics, physics, and theoretical mechanics prepared by members of the Belarusian Polytechnic Institute (Inst. I. V. Stalina) and other scientists. The mathematical material includes an analysis of problems relating to the theory of univalent functions of a complex variable, the boundary problem in the theory of vibrations, and a nomogram for the run-off of spring clouds. The experimental works include studies of the electroprecipitation processes, crystallization from melts, abrasive polluting of crystals, stress distribution in the frame of an automobile, and the elastic properties of a body during its plastic deformation. References follow the individual articles.

6. Savitskii, T. M. and M. A. Turzhitskovich. Simplifying the Technique of Approximate Calculation of Definite Integrals by Formulas of Numerical Quadrature 56
9. Bykovskii, V. B. Nomogram for the Formula of J. H. Nielsen for Calculating the Maximum Run-off of Spring Plates 69
10. Afanas'ev, N. V., A. M. Dashkov, and A. K. Shumaylov. On the Efficiency of the Electroperforation Process 73
11. Afanas'ev, N. V., M. B. Rehevskiy, and V. A. Frantsul'. About the Disperse Phase of Metal During High-Voltage Spark Discharge in a Gaseous Medium 82
12. Cheshnikov, L. I. Effect of an Electric Field on the Formation of Crystallization Centers in Supercooled Melt 98
13. Cheshnikov, L. I. Temperature Variation Energy of Supercooled Molecules of Saitol and Etilol Melts 106
14. Besantsev, N. A. Relationship Between the Work, Heat, and Absorbed Energy in the Abrasive Wear of Rock Salt Crystals 116
15. Abanirich, D. A., and N. A. Besanov. Effect of Surface Energy on the Abrasive Wear of Crystals 125
16. Opejko, P. A. Corresponding Member, AS BSSR, Professor, Doctor of Technical Sciences. Reducing Equations of Plane of Force Acting on a Caterpillar-Tractor in a Static State of Turning 138
18. Svitun, A. M. Investigation of Stresses in the Frame of a MZ-525 Automobile 141
19. Michiprovich, V. V. Studying the Elastic Behavior of a Body During Plastic Deformation 147,4

AKULOV, N.S.; SHUKEVICH, A.K.

Use of the statistical theory of dislocations in deriving the fundamental relations for strength curves. Dokl. AN BSSR 7 no.7:453-455 Jl '63. (MIRA 16:10)

1. Fiziko-tehnicheskiy institut AN BSSR.

STOYANOV, Filipp Dmitriyevich, vrach [deceased]; SHUKEVICH, Lidiya Ivanovna,  
vrach; KHARCHENKO, L.I., red.; STKBLYANKO, T.V., tekhn.red.

[The Pyatigorsk health resort] Kurort Piatigorsk. Stavropol',  
Stavropol'skoe knizhnoe izd-vo, 1959. 102 p. (MIRA 13:1)  
(FYATIGORSK--HEALTH RESORTS, WATERING PLACES, ETC.)

24.4000

75329  
SOV/57-29-10-6/18

AUTHOR: Shukeylo, I. A.

TITLE: A Strongly Focusing Lens With Cylindrical Poles

PERIODICAL: Zhurnal tekhnicheskoy fiziki, 1959, Vol 29, Nr 10, pp 1225-1227 (USSR)

ABSTRACT: The purpose of the paper is to study the possibility of replacing a hyperbolic cross section of a pole shoe of a magnetic lens with a circular arc cross section. It is claimed that this will simplify calculations and the manufacture of the lens. The hyperbola of the pole shoe is replaced as nearly as possible by an arc of a circle, and the equation of a circle is written. The magnetic field intensity is then calculated along various points of one of the axes, and the results are plotted for two values of  $\gamma$ . Definitions are given for neither  $\gamma$  nor any other symbol. It is claimed that the error introduced by replacing a hyperbola by an arc is no greater than 10%. Prof. G. A. Grinberg made some "useful remarks" to the author. There are 3 figures and 2 references, 1 Soviet, and 1 U.S. The U.S. reference is Courant,

Card 1/2

41318

S/057/62/032/009/001/014  
B125/B186

AUTHORS: Popov, A. V., Smirnov, P. V., and Shukeylo, I. A.

TITLE: Magnetic deflector

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 9, 1962, 1037 - 1039

TEXT: The authors constructed and tested a magnetic deflector which can be used in the injection systems of cyclic accelerators or in strong-focusing cyclotrons for inflecting the beam into the toroidal chamber. This magnetic deflector (Fig. 1) is 30 cm long and consists of an iron core and of two plane parallel rails. These are flown through by currents of equal strength but opposite direction and constitute a winding connected to the power source. The beam is deflected through a given angle within the space enclosed by the horizontal rails and the vertical plane surfaces of the core. The iron core renders the field within the deflector homogeneous if  $b/d \ll 1$ .  $b$  is the height of the central current-carrying part of the rail. The outer rail has the same effect even if this condition is not fulfilled. The scattered field of the inner current is compensated by the field of the current in the outer rail. The deflector is cooled by water flowing through pipes. An 800-a current in the rails induces a magnetic

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Magnetic deflector

S/057/62/032/009/001/014  
B125/B186

Fig. 3. Distribution of the magnetic field within the deflector, using shims.

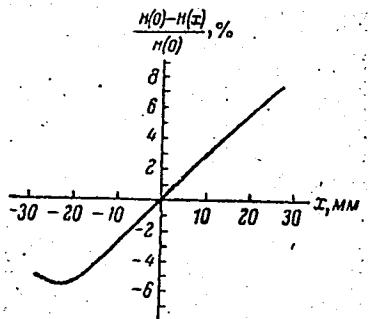
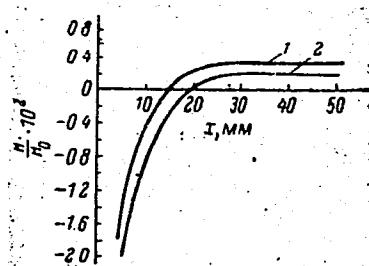


Fig. 4. Distribution of the deflector outside the shims.



Card 3/3

SHUKEYLO, I.A.

Extraction of particles from a strong-focusing synchrotron by  
means of an azimuthally periodic perturbation of the magnetic  
field. Zhur. tekhn. fiz. 33 no.10:1227-1231 O '63.

(MIRA 16:11)

L 26660-65 EWT(m)/EPA(w)-2/EWA(m)-2 Pt-10/Pab-10 IJP(c)

ACCESSION NR: AT5002706

S/3092/64/000/002/0056/0062

AUTHOR: Shukeylo, I. A.

37  
30  
BTI

TITLE: On the excitation of betatron oscillations by high frequency field in a strong-focusing synchrotron 10

SOURCE: Moscow. Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury. Elektrofizicheskaya apparatura; sbornik statey, no. 2, 1964, 56-62

TOPIC TAGS: synchrotron, strong focusing, particle accelerator, betatron oscillation, particle extraction

ABSTRACT: The author considers in detail the buildup of betatron oscillations by a high-frequency field, from the point of view of the possibility of extracting particles from a strong-focusing synchrotron. It is assumed that the magnetic high-frequency field does not depend on the radial coordinate and is vertically directed.

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L 26660-65

ACCESSION NR: AT5002706

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It is also assumed that the field is applied at a certain instant of time and its amplitude is established instantaneously. Formulas are derived for the amplitudes and phases of the oscillations excited by the high-frequency field at a given azimuth, as a function of the number of the revolution. It follows from the calculations that the high-frequency field excites betatron oscillations of nominal frequency, the amplitude of which increases linearly with the time. For fixed values of the revolution number and of the azimuth, the phase of the oscillations depends on the phase of the high-frequency field. It is shown that to extract the particles from the chamber it is sufficient to have the amplitudes of the oscillations increase by approximately 1 mm from revolution to revolution. This corresponds to a field of several times 10 Oersted at a length on the order of 1-meter in a synchrotron operating at several BeV. This can be readily accomplished by a magnet with a ferrite core. The factors that influence the resonance adversely are discussed briefly. Orig. art. has 40 formulas.

Card 2/3

L 26660-65

ACCESSION NR: AT5002706

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NR REF SOV: 002

OTHER: 003

Card

3/3

L 43086-65 EWT(m)/EPA(w)-2/EWA(m)-2 Pab-10/Pt-7 IJP(c) GS  
ACCESSION NR: AT5007913 S/0000/64/000/000/0058/0064 4/3  
4/2

AUTHOR: Doynikov, N. I.; Monoszon, N. A.; Titov, V. A.; Shukeylo, I. A.; Koman, Ye. G. B+1

TITLE: A high-energy accelerator with a supplementary control beam of particles

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963.  
Trudy. Moscow, Atomizdat, 1964, 58-64

TOPIC TAGS: high energy accelerator, particle accelerator, particle beam

ABSTRACT: Data is presented to show the technical and economic feasibility of constructing a 1000-Gev proton accelerator with strong focusing, which accords with present experience in the development and operation of cyclotrons. The basic design parameters and tolerances permitted in this accelerator are discussed. An auxiliary beam would be employed to determine the inaccuracies of the magnets and the instability of the foundation, thus permitting the needed corrections to be made in the main orbit of particles. An auxiliary chamber of large cross-section would permit determination of the beam's position at various cross-sections and the

Card 1/3

L 43086-65

ACCESSION NR: AT5007913

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accurate calculation of the height and radius of the magnets. Corrections similar to those signaled by the displacement of the orbit of the auxiliary beam would be introduced during the operation of the machine when the foundation is unstable. The aperture of the main beam has been chosen to be 6 x 3 cm, close to that planned at Brookhaven. The auxiliary beam would have no bearing on the tolerated errors and instability of the magnetic fields of the main electromagnet, since it would control only the geometric configuration of the blocks of the electromagnet, considered the main problem in the case of very large orbital radii. With an electrostatic control system having a potential of 35 kv between the plates, it is calculated, the contact potential difference of only  $10^{-6}$  of the main potential would exert no influence on the position of the auxiliary beam. The stray fields in the straight sections would have negligible effect on the main beam, because the auxiliary beam in the electrostatic system is situated in a zone of small stray fields (one cersted), easily shielded (by permalloy) just as in the case of the magnet system of the auxiliary beam. The alternative of an optical auxiliary beam for alignment was not considered since a proton beam was found simplest to employ. No attempts were made to shield stray fields in the straight sections of the main electromagnet, which is a general problem for all accelerators and not therefore considered in the present report. The stray fields' effect on the orbit of the auxiliary beam is small.

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L 43086-65

ACCESSION NR: AT5007913

(one oersted) and reduced by a factor of 90-100 by normal shielding such as is used in Soviet linear accelerators. Orig. has 3 figures, 4 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury imeni D. V. Yefremova GKAE SSSR (Scientific Research Institute of Electrophysical Apparatus, GKAE SSSR).

SUBMITTED: 26May64

ENCL: 00

SUB CODE: NP

NO REF SOV: 001

OTHER: 000

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Card 3/3

I 40924-65 EPA(w)-2/EMT(m)/EWA(m)-2 Pt-10/Pab-10 IJP(c)  
S/0057/65/035/003/0421/0427  
ACCESSION NR: AP5007285

AUTHOR: Shukeylo, I.A.

TITLE: Theoretical analysis of the particle extraction process in a strong focusing synchrotron under parametric resonance conditions

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.3, 1965, 421-427

TOPIC TAGS: strong focusing accelerator, beam deflection, betatron oscillation, beam extraction

ABSTRACT: The solutions of the equation for radial betatron oscillations in a strong focusing synchrotron are discussed by a method similar to that employed by A.A.Kolomenskiy (ZhTF 26, 1969, 1956). The equation discussed includes in the expression for the axial component of the magnetic field in the vicinity of the orbit a term proportional to the cube of the distance from the equilibrium orbit. The inclusion of this term is regarded as much more important in the strong focusing than in the weak focusing case. Expressions are derived for the buildup time and phase bunching of the betatron oscillations under the assumption that the extraction process is initiated by an instantaneous shift of the betatron oscillation frequency

Card 1/2

L 40924-65

ACCESSION NR: AP5007285

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to the resonance value. The influence of the cubic term in the axial magnetic field component is illustrated by numerical calculations for definite but presumably typical values of the parameters. It is concluded that parametric excitation of resonance betatron oscillations can be usefully employed for beam extraction from strong focusing synchrotrons, but that the most efficient beam extraction would probably be achieved by a combination of methods. Orig.art.has: 26 formulas and 5 figures.

ASSOCIATION: none

SUBMITTED: 02Apr64

ENCL: 00

SUB CODE: NP

NR REF Sov: 003

OTHER: 005

Card 2/2 MB

L 52021-65 EPA(w)-2/EWT(m)/EWP(l) Pt-7/Pab-10 IJF(c)

ACCESSION NR: AP5012056 UR/0057/65/035/005/0905/0909  
39  
37  
38

AUTHOR: Shukeylo, I.A.

TITLE: The "image" effect in beam accumulators

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 5, 1965, 905-909

TOPIC TAGS: particle accelerator, particle beam, beam stability

ABSTRACT: The author calculates the effect of the conductive walls of the toroidal chamber on the motion of an intense beam of ultrarelativistic particles circulating in a weak-focusing cyclic accelerator or beam accumulator. The problem is simplified by neglecting the curvature of the beam and the effect of the side walls, and assuming the upper and lower walls to be perfectly conducting planes. Bunching of the beam is taken into account by expanding the charge, current, and fields in Fourier series. The field of the beam is calculated by means of an image method under the boundary conditions that the scalar potential and the normal component of the magnetic field vanish on the upper and lower walls of the chamber. The field thus calculated is employed to obtain the equation for the betatron oscillations of

Card 1/2

L 52021-65

ACCESSION NR: AP5012056

2

the beam (which is again regarded as circular), and this equation is discussed very briefly. "I take the occasion to express my gratitude to N.I.Doynikov and B.S. Mingalev for participating in discussions of the work." Orig. art. has: 22 formulas and 2 figures.

ASSOCIATION: None

SUBMITTED: 04Jul64

ENCL: 00

SUB CODE: NP

NR REF Sov: 002

OTHER: 001

Card 2/2 mb

GOGOV, G.A.; LEBEDEV, A.P.; SHUKEMLO, I.A.

Electromagnetic deflector for electron extraction from a  
synchrotron. Elektrosis. App. no. 2:120-130 '64.

(MIRA 18:3)

SHUKEYR, A.A.

Study of the pathomorphology of experimental rabies in laboratory  
animals infected by an embryonal Flury strain. Vop. virus 8 no.5:  
568-574 S-0'63 (MIRA 17:1)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

AUTHORS: Shukh, Ya.I. and Knopov, I.D.

68-58-5-6/25

TITLE: Group Pushing (Scheduling) of Ovens (Gruppovaya vydacha pechey)

PERIODICAL: Koks i Khimiya, 1958, Nr 5, pp 24 - 26 (USSR).

ABSTRACT: At the Works, Nr 3 (old) and Nr 4(new) batteries were operated on the same schedule. Due to the above, the coke produced from Nr 3 battery was non-uniform, under-coked charges and stickers often occurred. This necessitated some rearrangement of the pushing schedule, namely, Nr 3 battery was divided into 8 groups of 6 ovens and Nr 4 battery into 7 groups of 9 ovens, with coking time of 16.0 and 14.0 hours, respectively. In the scheduling of ovens, their state was taken into consideration. It is stated that with the introduction of "group pushing", conditions of servicing the batteries and the quality of coke improved. Group scheduling of ovens is recommended for coke oven works operating batteries of various ages and degrees of wear. There are 6 tables.

ASSOCIATION: Rutchenkovskiy koksokhimicheskiy zavod

Card 1/1 (Rutchenkovskiy Coke Oven Works)

SOV/68-59-8-9/32

AUTHOR: Shukh, Ya. I.

TITLE: The Use of Elongated Recording Diagrams for Meters  
Recording the Consumption of Gas in Order to Account  
for the Time Taken for Reverses When Determining the  
Consumption of Gas for Heating Coke Ovens (Primeneniye  
metoda rastyanutiykh diagramm dlya ucheta vremeni  
kantovok pri opredelenii raskhoda gaza na obogrev  
koksovykh pechey)

PERIODICAL: Koks i khimiya, 1959, Nr 8, pp 21-23 (USSR)

ABSTRACT: In recorders normally used for the determination of the amount of gas used for heating, the velocity of the recording paper is too small (20 mm/hr) for the determination of the time taken for reverses during which the supply of gas is cut off. The decrease in the consumption of gas during reverses was determined on the Rutchenkovskiy Works by increasing the speed of the recording strip to 200 mm/hr. It was found that the total decrease in the gas consumption due to reverses amounted to 1 - 4.7%. It is pointed out that for each battery a correcting coefficient for the consumption of gas can be determined in this way

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SOV/68-59-8-9/32

The Use of Elongated Recording Diagrams for Meters Recording the Consumption of Gas in Order to Account for the Time Taken for Reverses when Determining the Consumption of Gas for Heating Coke Ovens

and then applied to the usual recorders. There is 1 figure and 1 table.

ASSOCIATION: Rutchenkovskiy koksokhimicheskiy zavod  
(Rutchenkovskiy Coking Works)

Card 2/2

ZARAYSKIY, P.K.; ROTT, M.V.; SENYUTA, V.N.; SHUKH, Ya.I.; MARKOV, A.Ye.;  
Prinimala uchastiye SHIPULINA, L.A.

Soda-potash method for hydrogen sulfide removal from coke-oven  
gas. Koks i khim. no.4:40-43 '62. (MIRA 16:8)

1. Rutchenkovskiy koksokhimicheskiy zavod.  
(Gases--Purification) (Hydrogen sulfide)

SHUKHA, V.A.

SHUKHA, V.A.

New design for the doors of drying chambers. Der. prom. 10  
no.8:23 Ag '61. (MIRA 14:8)  
(Drying apparatus)  
(Doors)

SHUKHANOV, Ye., insh.

Prospects for developing radar equipment for navigation.  
Mor. flot 19 no. 7-10-13 J1 '59. (MIRA 12:10)

1. Sluzhba svyazi i elektronradionavigatsii chernomorskogo parokhodstva.  
(Radar in navigating)